

REMARKS

Claims 26 and 29-54 are currently pending in this application. By this amendment, Claims 26, 29, 32, 40, 41, 44 and 48 have been amended and Claims 27 and 28 have been canceled. No new matter has been added to this application by this amendment. In view of the amendments above and the remarks to follow, Applicants respectfully request reconsideration and allowance of this application.

In the Office Action, the drawings were objected to as failing to comply with 37 C.F.R. §1.84(p)(4) because reference character “32” has been used to designate both the closure member and the dynamic clamping member in paragraph 36 of the specification. Paragraph 36 of the specification has been amended to correct a typographical error. More specifically, on line 19 of paragraph 36, “closure member 32” has been changed to --dynamic clamping member 32--. As such, applicants submit that the drawings are consistent with the specification and no amendment to the drawings is necessary. Applicants respectfully request that the objection to the drawings be withdrawn.

In the Office Action, the abstract of the disclosure was objected to “because it is in claim format and it does not include [that] which is new in the art to which the invention pertains.” Applicants have amended the Abstract and submit that the Abstract now satisfies the requirements specified in MPEP §608.01(b).

In the Office Action, Claims 26, 27, 42, 43, 45 and 47 were rejected under 35 U.S.C. §102(a) over U.S. Patent No. 6,835,199 to McGuckin (“McGuckin”). McGuckin discloses a system for stapling tissue shown in FIGS. 5, 14 and 15 reproduced below. The system includes a

C-shaped stapling assembly 16 which includes a clamping member 60 to finely approximate jaws 17 and an I-beam member 70 including upper and lower beam portions 82a and 82b connected by a central web portion. Each beam portion has a substantially linear transverse cross-section. McGuckin's assembly 16 includes a drive cable 64 for driving a drive gear 63 to actuate clamping member 60. A linear drive screw 76 drives a flexible pusher 80 to actuate I-beam member 70.

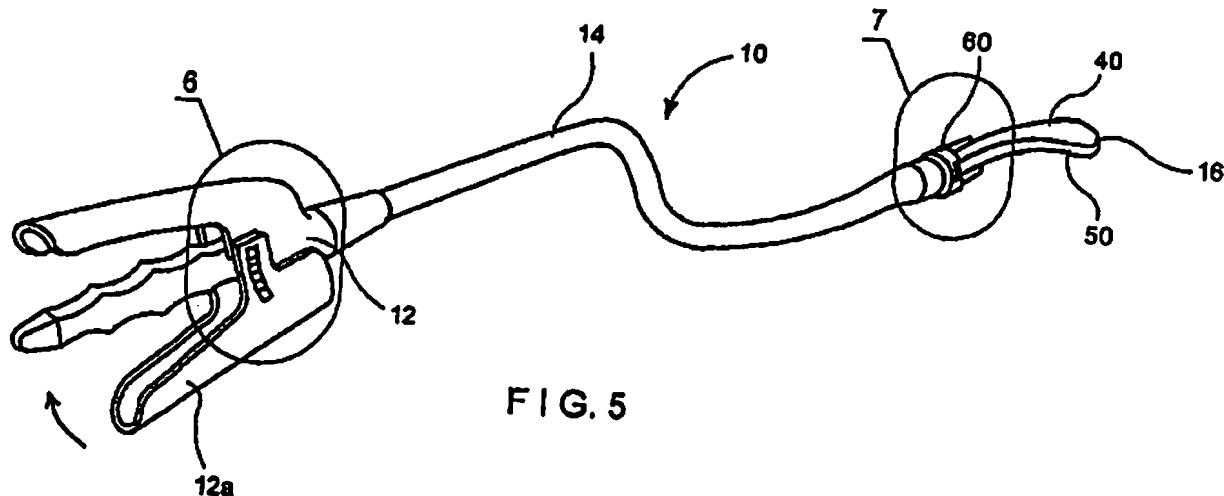


FIG. 5

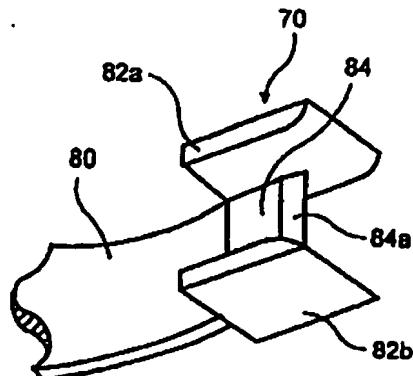


FIG. 14

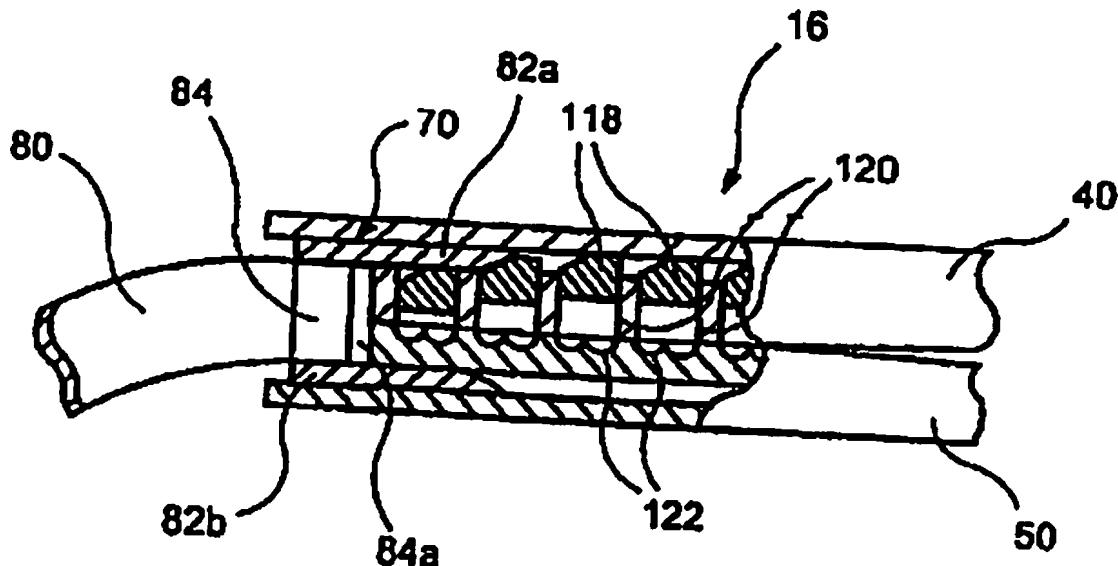


FIG. 15

Claim 26 recites a tool assembly comprising *inter alia*, a clamp member, a dynamic clamping member, and “a drive member operably connected to the clamp member and the dynamic clamping member, the drive member being formed from a cable and being movable to move the clamp member and the dynamic clamping member between their first and second positions, wherein the drive member includes a coaxial drive cable, the coaxial drive cable including an outer sheath and a center rod, the center rod being movable independently of the outer sheath.” Applicants respectfully submit that McGuckin fails to disclose the tool assembly recited in Claim 1. More specifically, McGuckin fails to disclose “a drive member operably connected to the clamp member and the dynamic clamping member . . . wherein the drive member includes a coaxial drive cable, the coaxial drive cable including an outer sheath and a center rod, the center rod being movable independently of the outer sheath.” As discussed

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above, McGuckin's assembly includes a drive cable/drive gear to actuate the clamping member and a drive screw/flexible pusher to actuate the I-beam member and does not include a coaxial drive cable as recited in Claim 26. For at least this reason, Applicants submit that Claim 26 is patentable over McGuckin.

Claims 27, 42, 43, 45 and 47 depend either directly or indirectly from Claim 26. For at least the reasons discussed above with respect to Claim 26, *inter alia*, Applicants submit that Claims 27, 42, 43, 45 and 47 are also in condition for allowance.

In the Office Action, Claims 28-33, 40, 41 and 44 were rejected under 35 U.S.C. §103(a) over McGuckin in view of U.S. Patent No. 5,690,269 to Bolanos et al. ("Bolanos"). In the Office Action, the Examiner stated that "Bolanos teaches the concept of a drive member having a coaxial drive cable with an outer sheath (200) and a center rod (70) for the purpose of properly articulating an endoscopic portion".

Bolanos discloses an endoscopic stapler 10, shown in FIGS. 1, 3 and 6 reproduced below, which includes a handle assembly 12, an endoscopic portion 14 and a fastener applying assembly 20. Endoscopic portion 14 includes an articulation joint 16. Endoscopic portion 14 includes an inner rod 70, a cover tube 102, firing wires 37, articulation rod 96 and inner rod sheath 200. Inner rod 70 is connected to a jaw cam pin 134. Actuation of movable handle 60 effects movement of inner rod 70 and cam pin 134 to effect movement of jaws 124a and 124b. Sheath 200 is connected to rotation knob 150 and functions to translate rotational movement from knob 150 to the distal articulating portion 186 and jaws 124.

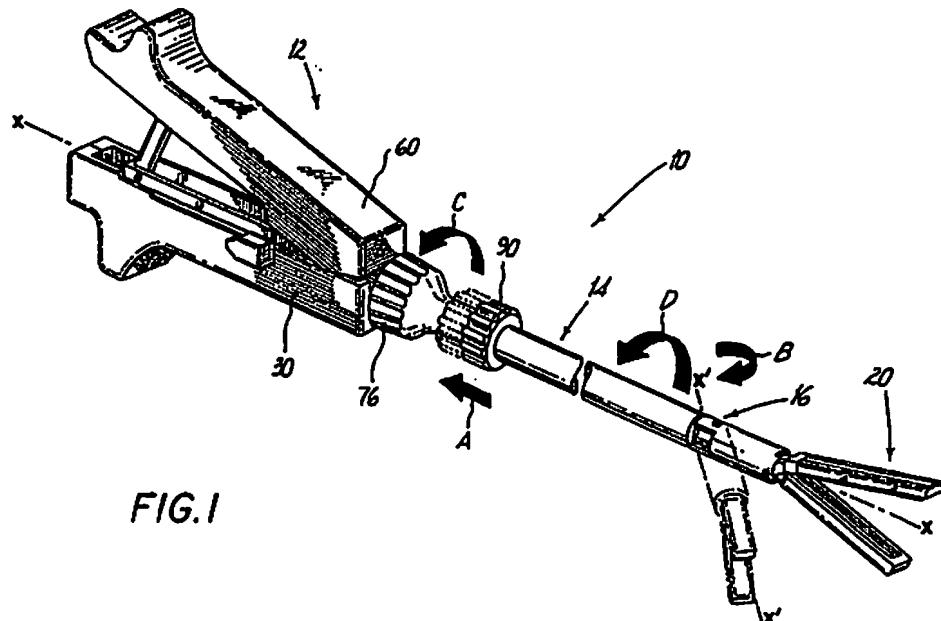
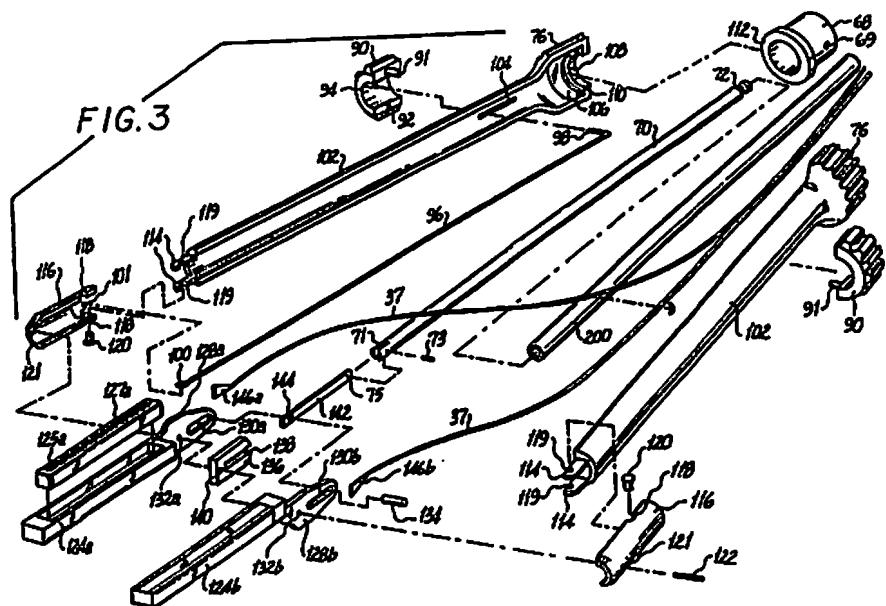


FIG. 1



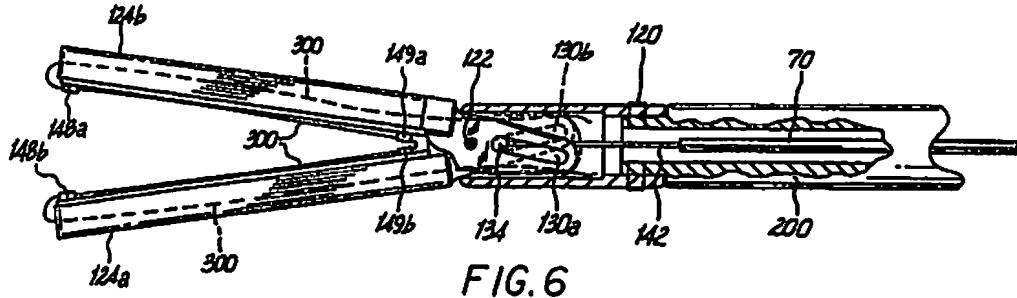


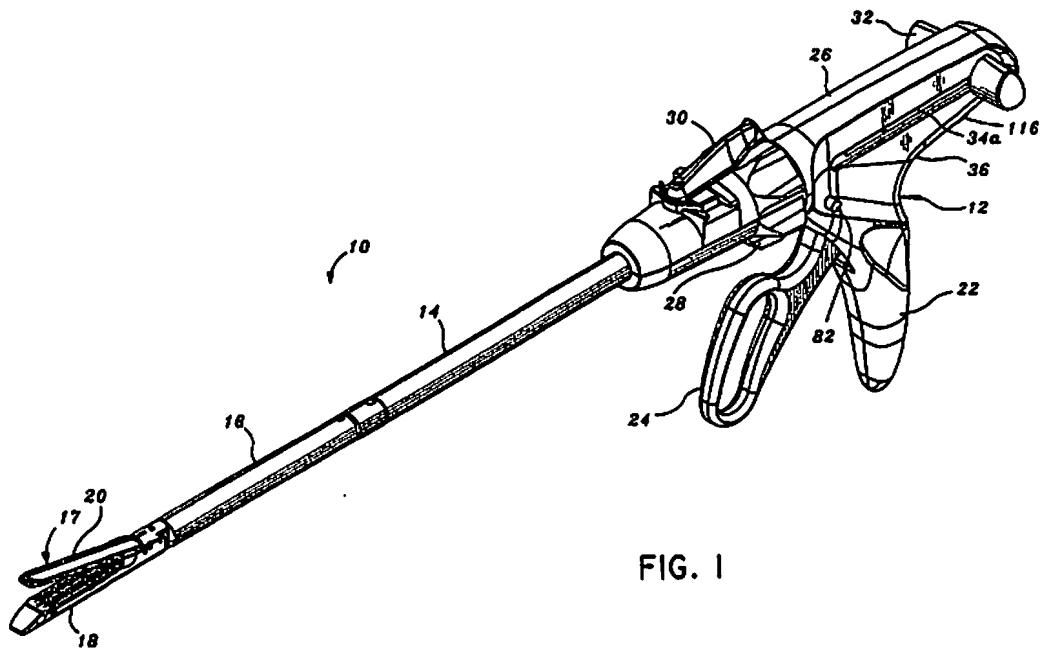
FIG. 6

Each of Claims 29-33, 40, 41 and 44 depends from Claim 26. Applicants respectfully submit that neither McGuckin nor Bolanos disclose a tool assembly such as recited in Claim 26. More specifically, neither McGuckin nor Bolanos disclose an assembly including, a drive member operably connected to the clamp member and the dynamic clamping member, the drive member being formed from a cable and being movable to move the clamp member and the dynamic clamping member between their first and second positions, wherein the drive member includes a coaxial drive cable, the coaxial drive cable including an outer sheath and a center rod such as recited in Claim 26. In contrast, Bolanos discloses a rotatable sheath for rotating an articulating portion of the staples, and a center rod for driving a cam member to approximate a pair of jaws. Bolanos does not teach or suggest providing a coaxial drive cable to move a clamp member and a dynamic clamping member as recited in Claim 26. As discussed above, McGuckin also fails to disclose such a drive member. For at least this reason, Applicants submit that Claim 26 is patentable over McGuckin and Bolanos, taken alone or in combination.

In the Office Action, Claims 48-50 and 52-54 were rejected under 35 U.S.C. §103(c) over McGuckin in view of U.S. Patent No. 6,669,073 to Milliman et al. ("Milliman"). Milliman discloses a surgical stapling apparatus shown in FIGS. 1, 32 and 49 reproduced below.

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Milliman's apparatus includes a drive assembly 212 having a cylindrical cam roller 286 configured to engage a cam surface 209 on anvil body 204 and a support member 287 which is slidably positioned along a bottom surface of staple cartridge 220. Cam roller 286 and support member 287 define linear transverse cross-sections which define linear surfaces for engaging the anvil and cartridge assemblies, respectively.



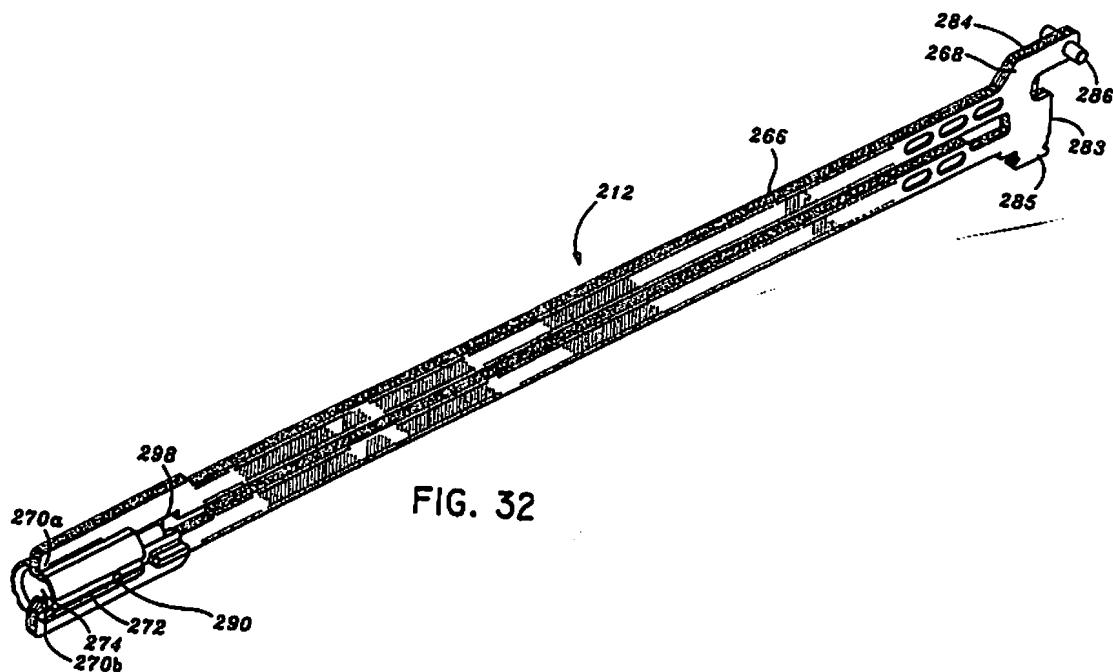


FIG. 32

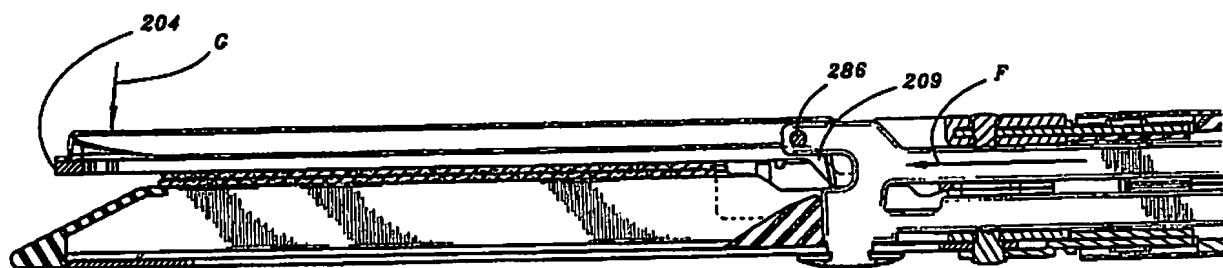


FIG. 49

Claim 48 recites, *inter alia*, "a dynamic clamping member...including an upper flange portion engaging a surface of the anvil and a lower flange portion engaging a surface of the cartridge assembly, at least one of the upper and lower flange portions having an arcuate cross-section along an axis transverse to a longitudinal axis of the cartridge assembly to define an arcuate surface positioned to engage at least one of the surface of the anvil and the surface of the cartridge assembly". See FIG. 14 below. As discussed above, neither McGuckin nor Milliman disclose such a dynamic clamping member. More specifically, each of the drive members of McGuckin and Milliman include engagement members which define linear engagement surfaces in a direction transverse to the longitudinal axis of the tool assembly. For at least this reason, Applicants submit that Claim 48 is patentable over McGuckin and Milliman, taken alone or in combination.

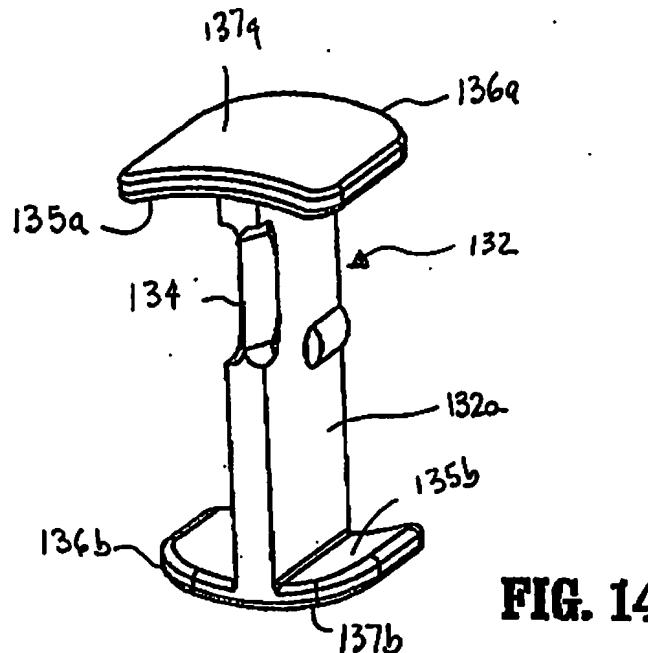


FIG. 14

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In the Office Action, Claims 26, 34-39, 42, 43 and 45-54 were rejected under 35 U.S.C.

§103(a) over U.S. Patent No. 5,485,952 to Fontayne (“Fontayne”) in view of Milliman.

Fontayne discloses a surgical stapling apparatus 10, shown in FIGS. 4 and 8 reproduced below, comprising, *inter alia*, a cartridge housing 16, an anvil member 18, and a collar tube 90. Collar tube 90 functions to move anvil member 18 to a closed position. An actuator rod 286 is also movable to drive pusher elements upwardly to urge staples 302 from a cartridge element 300.

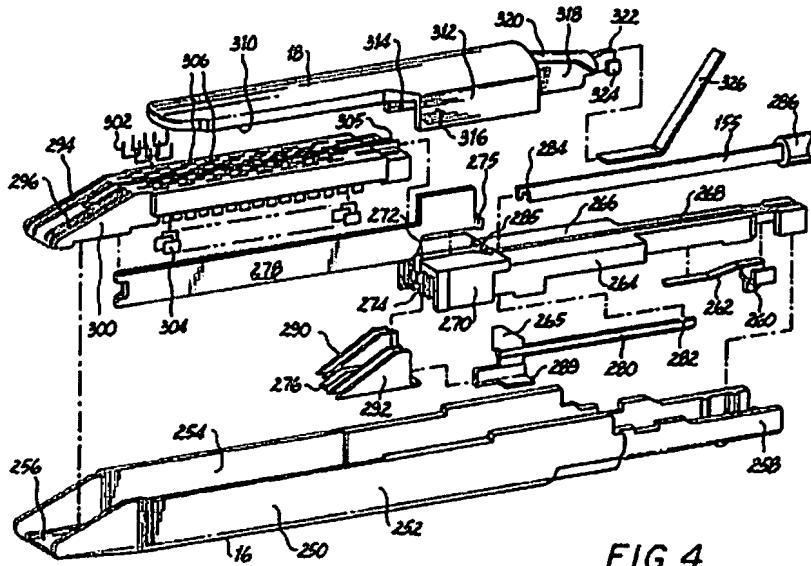
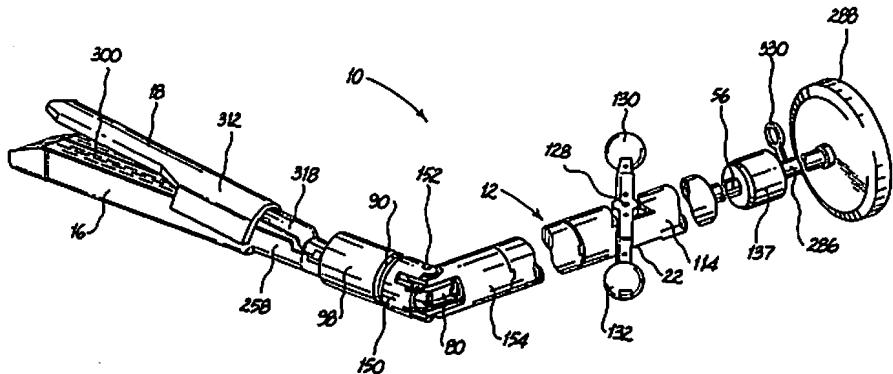


FIG. 8



As discussed above, Claim 26 recites a tool assembly including, *inter alia*, a clamp member, a dynamic clamping member, and “a drive member operably connected to the clamp member and the dynamic clamping member, the drive member being formed from a cable and being movable to move the clamp member and the dynamic clamping member between their first and second positions, wherein the drive member includes a coaxial drive cable, the coaxial drive cable including an outer sheath and a center rod.” Applicants respectfully submit that neither Fontayne nor Milliman disclose the tool assembly recited in Claim 26 because neither Fontayne nor Milliman disclose a drive member formed from a coaxial drive cable which is movable to move the clamp member and dynamic clamping member between their first and second positions as recited in Claim 26. For at least this reason, Applicants submit that Claim 26 and Claims 34-39, 42, 43 and 45-47 which depend therefrom are patentable over Fontayne and Milliman, taken alone or in combination.

With respect to Claim 48, neither Fontayne nor Milliman disclose “a dynamic clamping

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member...including an upper flange portion engaging a surface of the anvil and a lower flange portion engaging a surface of the cartridge assembly, at least one of the upper and lower flange portions having an arcuate cross-section along an axis transverse to a longitudinal axis of the cartridge assembly to define an arcuate surface positioned to engage at least one of the surface of the anvil and the surface of the cartridge assembly". As discussed above Milliman discloses an engagement member which defines linear engagement surfaces in a direction transverse to the longitudinal axis of the tool assembly. Fontayne does not cure the deficiencies of Milliman. See, for example, FIG. 4 of Fontayne reproduced below which illustrates flat wing-like structure 289 for engaging channel portion 250 of the cartridge assembly. For at least this reason, Applicants submit that Claim 48 and Claims 49-54 are patentable over Fontayne and Milliman, taken alone or in combination.

In the Office Action, Claim 27-33, 40-41 and 44 were rejected under 35 U.S.C. §103(a) over Fontayne in view of Milliman and Bolanos. Claims 27-33, 40, 41 and 44 depend, either directly or indirectly, from Claim 26. For the reason discussed above, Applicants submit that Claim 26 is patentable over Fontayne, Milliman and Bolanos, taken alone or in combination. For at least this same reason, Applicants submit that Claims 27-33, 40, 41 and 44 which depend from Claim 26 are also in condition for allowance.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims pending in this application, namely Claims 26 and 29-54 are in condition for allowance. Accordingly, early and favorable reconsideration of this application is respectfully requested.

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Should the Examiner feel that a telephone or personal interview may facilitate resolution of any remaining matters, she is respectfully requested to contact Applicant's attorney at the number indicated below.

Respectfully submitted,

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